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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,423	04/06/2000	Daniel Joseph Ondrus	200-0500	7482

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EXAMINER

KOCH, GEORGE R

ART UNIT PAPER NUMBER

1734

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/544,423

Applicant(s)

ONDRUS, DANIEL JOSEPH

Examiner

George R. Koch III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23,25,26,31,33,34 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23,25,26,31,33,34 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 8/16/2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 23, 25, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kehr (US Patent 3,660,217).

Kehr discloses a method of repetitively form a joint (as represented by each glue line and each layer) between two members (for example, 24b and 24c) during a manufacturing process using a viscous adhesive (see description of adhesive properties in columns 2-5), the method comprising the steps of positioning a first member to be in

contact with a second member (24b and 24c, for example) to form a coach joint (see Figure 3) during a manufacturing process, wherein the joint is defined by both a coverage portion extending along the first member and a fill portion adjacent the coverage portion and extending along the first member (these are considered inherent properties for all coach/lap joints), and depositing the viscous adhesive along up to fifty percent of the coverage portion and up to ten percent of the fill portion (as shown by the fact that the glue lines only cover substantially below fifty percent of the area) to repetitively form the joint between the first member with the second member during the manufacturing process, so that the seepage of the adhesive from the joint is a minimum while the stress transfer of the joint is a maximum (inherent properties).

As to claim 25, Kehr discloses full coach joints (see Figure 3).

As to claim 31, Kehr discloses a method of repetitively (represented by each glue line and each layer) forming a joint between two members (for example, layers 24b and 24c) during a manufacturing process using a viscous adhesive, the method comprising the steps of positioning a first member (24b) having an arcuate portion (shown in Figure 3) to be in contact with a second member to form a coach joint during the manufacturing process, wherein the joint is defined by both a coverage portion extending along the first member from a first point at a first end of the first member to a second point at which the first member begins to curve to form a tangent portion, and a flange fill portion extending from the second point to a line segment that is collinear to the tangent portion (the definition of the joint is inherent to the coach joint), and depositing the viscous

adhesive along up to fifty percent of the coverage portion and up to ten percent of the fill portion to repetitively form the joint between the first member with the second member during the manufacturing process (as shown by the fact that the glue lines only cover substantially below fifty percent of the area), so that seepage of the adhesive from the joint is a minimum while stress transfer is a maximum (inherent properties).

As to claim 33, Kehr discloses full coach joints (see Figure 3).

4. Claim 36 is rejected under 35 U.S.C. 102(b) as being anticipated by Kunz (US Patent 4,803,124).

As to claim 36, Kunz discloses a method of repetitively forming a lap joint (see Figure 6 and 5) between two members using a viscous adhesive during a manufacturing process, the method comprising the steps of positioning a first planar member (item 41) to overlap a second generally planar member (item 49) to form a lap joint during the manufacturing process, wherein the joint includes a coverage portion defined by a length of overlap between the first member and the second member, and depositing the viscous adhesive (starfish 21) at a center point for the coverage length and applying the adhesive between fifty to seventy five percent of the coverage portage, so that it is equidistant from the center point, to repetitively interconnect the first member and the second member for each joint during the manufacturing process, so that seepage of the adhesive from the joint is a minimum value while stress transfer of the joint is a maximum. The difference between the coverage length in Figure 5 and the overlap length in Figure 6 is between 50 to 75 percent, especially at the inward portions

of the starfish pattern. Furthermore, since Kunz is directed towards bonding of semiconductor "chips", emphasis plural, each chip bonded is considered a repeated bonding operation in a manufacturing process.

Claim Rejections - 35 USC § 103

5. Claims 26, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerhr as applied to claims 23 and 31 above, and further in view of Adhesives Handbook, (pages 1-19, 28-31, 40-43 and 94).

Kehr discloses all of the limitations of claims 23 and 31.

As to claims 26 and 34, Kehr discloses full coach joints, but does not disclose one half coach joints.

However, as to claims 25 and 34, Adhesives Handbook discloses many well-known joints, including one half coach joints as in claim 26 and 34 (see page 11, and page 12, top row, third and fourth figure) and full coach joints as in claims 25 and 33 (for example, see page 12, top row, third and fourth figure). One in the art would appreciate that all of these joints are well known, have certain favorable loading and manufacturing characteristics (see Adhesives Handbook, pages 8, 18 and 19), and would utilize routine experimentation such as a stress analysis as disclosed in Adhesives Handbook to determine the appropriate joint. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the claimed joints

disclosed in Adhesives Handbook in order to achieve proper stress handling characteristics.

Response to Arguments

6. Applicant's arguments with respect to claims 23, 25, 26, 31, 33, 34 and 36 have been considered but are moot in view of the new ground(s) of rejection. Kehr has been applied in response to arguments as to lack of repetitiveness, and failure to disclose reduced coverage areas, with respect to coach joints and one half coach joints. Kunz Kehr has been applied in response to arguments as to lack of repetitiveness, and failure to disclose reduced coverage areas, with respect to lap joints.

Conclusion

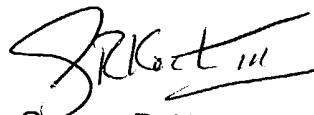
Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George R. Koch III
Patent Examiner
Art Unit 1734

George R. Koch III
11/01/2004



CHRIS FIORILLA
SUPERVISORY PATENT EXAMINER

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